

Title (en)

FERMENTATIONS OF ACETOGENIC BACTERIA WITH SPECIFIC CYSTEINE CONCENTRATIONS

Title (de)

FERMENTATIONEN ACETOGENER BAKTERIEN MIT DEFINIERTEN CYSTEIN KONZENTRATIONEN

Title (fr)

FERMENTATIONS DE BACTÉRIES ACÉTOGÈNES AVEC DES NIVEAUX DE CYSTÉINE SPÉCIFIQUES

Publication

EP 3037519 A1 20160629 (EN)

Application

EP 14199536 A 20141222

Priority

EP 14199536 A 20141222

Abstract (en)

The present invention relates to a method of culturing at least one acetogenic bacteria, the method comprising growing the bacteria in an aqueous medium comprising an amount of cysteine and/or cystine, wherein the cysteine and/or cystine concentration in the medium is maintained at a concentration less than 0.20 g/L.

IPC 8 full level

C12N 1/20 (2006.01); **C12P 7/06** (2006.01); **C12P 7/54** (2006.01)

CPC (source: EP US)

C12N 1/20 (2013.01 - EP US); **C12P 7/065** (2013.01 - EP US); **C12P 7/24** (2013.01 - US); **C12P 7/54** (2013.01 - EP US);
Y02E 50/10 (2013.01 - EP US)

Citation (applicant)

- MORINAGA ET AL., J. BIOTECHNOL., vol. 14, 1990, pages 187 - 194
- SCHMIDT ET AL., CHEM. ENG. COMMUN., vol. 45, 1986, pages 61 - 73
- SAKAI ET AL., BIOTECHNOL. LET., vol. 29, 2004, pages 1607 - 1612

Citation (search report)

- [X] US 2012094349 A1 20120419 - GADDY JAMES L [US], et al
- [X] US 2014220649 A1 20140807 - TOBEY RICHARD E [US], et al
- [X] YU E K C ET AL: "Enhanced acetone-butanol fermentation by Clostridium acetobutylicum grown on d-xylose in the presence of acetic or butyric acid", FEMS MICROBIOLOGY LETTERS, WILEY-BLACKWELL PUBLISHING LTD, GB, vol. 18, no. 1-2, 1 April 1983 (1983-04-01), pages 103 - 107, XP023919053, ISSN: 0378-1097, [retrieved on 19830401]
- [XI] SIM ET AL: "Optimization of acetic acid production from synthesis gas by chemolithotrophic bacterium -Clostridium aceticum using statistical approach", BIORESOURCE TECHNOLOGY, ELSEVIER BV, GB, vol. 99, no. 8, 7 February 2008 (2008-02-07), pages 2724 - 2735, XP022460601, ISSN: 0960-8524, DOI: 10.1016/J.BIORTECH.2007.07.004
- [XI] GUO Y ET AL: "Medium optimization for ethanol production with Clostridium autoethanogenum with carbon monoxide as sole carbon source", BIORESOURCE TECHNOLOGY, ELSEVIER BV, GB, vol. 101, no. 22, 1 November 2010 (2010-11-01), pages 8784 - 8789, XP027181715, ISSN: 0960-8524, [retrieved on 20100708]
- [X] PRASANTH MADDIPATI ET AL: "Ethanol production from syngas bystrain P11 using corn steep liquor as a nutrient replacement to yeast extract", BIORESOURCE TECHNOLOGY, ELSEVIER BV, GB, vol. 102, no. 11, 16 March 2011 (2011-03-16), pages 6494 - 6501, XP028480899, ISSN: 0960-8524, [retrieved on 20110321], DOI: 10.1016/J.BIORTECH.2011.03.047
- [XI] OLIVARES D ET AL: "Effect of the concentration of glycerol on the productivity of 1,3-propanediol using Clostridium butyricum", NEW BIOTECHNOLOGY, ELSEVIER BV, NL, vol. 25, 1 September 2009 (2009-09-01), pages S96, XP026461200, ISSN: 1871-6784, [retrieved on 20090812], DOI: 10.1016/J.NBT.2009.06.382
- [XI] YUAN Z ET AL: "Enhancement effect of l-cysteine on dark fermentative hydrogen production", INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, ELSEVIER SCIENCE PUBLISHERS B.V., BARKING, GB, vol. 33, no. 22, 1 November 2008 (2008-11-01), pages 6535 - 6540, XP025627061, ISSN: 0360-3199, [retrieved on 20081009], DOI: 10.1016/J.IJHYDENE.2008.07.065

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3037519 A1 20160629; AR 103237 A1 20170426; BR 102015031744 A2 20170509; CA 2916115 A1 20160622; CN 105713854 A 20160629; EP 3037520 A1 20160629; KR 20160076450 A 20160630; MX 2015017414 A 20160621; RU 2015154539 A 20170622; US 2016177259 A1 20160623

DOCDB simple family (application)

EP 14199536 A 20141222; AR P150104247 A 20151222; BR 102015031744 A 20151217; CA 2916115 A 20151221; CN 201510967285 A 20151221; EP 15201475 A 20151221; KR 20150180654 A 20151217; MX 2015017414 A 20151216; RU 2015154539 A 20151218; US 201514969891 A 20151215